

RECEIVED
CENTRAL FAX CENTER

OCT 25 2006

Doc Code: AP.PRE.REQ

PTO/SB/33 (07-05)

Approved for use through xx/xx/200x. OMB 0651-00xx

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)	
<p>I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]</p> <p>on <u>October 25, 2006</u></p> <p>Signature <u><i>Anne Vachon Dougherty</i></u></p> <p>Typed or printed name <u>Anne Vachon Dougherty</u></p>		Application Number	Filed
		10/085,455	02/27/2006
		First Named Inventor	
		Kawahito	
Art Unit		Examiner	
2192		C. Pham	
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <p><input type="checkbox"/> applicant/inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> attorney or agent of record. 30,374</p> <p>Registration number</p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34.</p> <p>Registration number if acting under 37 CFR 1.34</p> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.</p> <p><input checked="" type="checkbox"/> *Total of <u>1</u> forms are submitted.</p>			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1460, Alexandria, VA 22313-1460.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

10/085,455

Claims 1-4 and 6-16 are rejected under 35 USC 102 as anticipated by Linden and Claim 5 is rejected under 35 USC 103 as unpatentable over Linden in view of Shaylor.

The invention is a dynamic compiler, compiling method, computer, storage medium and support program for optimizing a program during compiling. The compiling invention performs a dynamic analysis during execution to determine whether the execution speed of the program can be increased by fixing, in a specific state, a parameter for a predetermined command in the program and then employs the results of the analysis to generate a path along which the parameter of the predetermined command is fixed in the specific state. Since the invention generates the path along which the parameter will be fixed in the specific state, it provides for dynamic specialization in the instances when the call method cannot be specified at a location whereat the method call is to be issued.

The Linden patent publication is directed to a dynamic compiler and method in which code is translated to run on a target machine that is different from the machine for which the code was developed. Under the Linden teachings, the intent and purpose of original instructions in the code are evaluated and new instructions are generated to arrive at the same result on the target machine. Linden says, at

10/085,455

paragraph [[0041]], that the method provides "an interpolation from the source instructions to the equivalent results to be achieved by the target processor, independent of the operations specified by the source instructions". Linden creates new instructions for the target device "independent of operations specified by the source instructions" whereas the present invention uses the "predetermined command in said program" but dynamically generates a path along which a parameter for the command is fixed in a specific state.

The language of Claims 1-4 and 7-16 expressly recite determining whether the execution speed can be increased by fixing a parameter for a predetermined command in a specific state and dynamically generating a path along which that parameter is fixed in that state. Linden does not look at a parameter of a predetermined command; rather, Linden looks at the intent and purpose of instructions. Further, Linden does not dynamically create a path along which a parameter of a predetermined command is fixed in a specific state. Linden teaches translating an instruction sequence into another sequence where the result is always a constant (paragraph [[0038]]), but that is not the same as or suggestive of dynamically creating a path along which a parameter of a predetermined command is fixed in a specific

10/085,455

state. Applicants reiterate that Linden is not maintaining a predetermined command, is not determining a parameter for a predetermined command, and is not dynamically creating a path along which a parameter of a predetermined command is fixed in a state.

The Examiner has argued that "Linden clearly discloses optimizing the source program by generating an (sic) new instruction for the source instruction where the result is always a constant, for example by eliminating certain operations". Applicants respectfully assert that eliminating operations is not claimed. Applicants further assert that eliminating operations is not the same as the claimed step of determining whether execution speed can be increased by fixing a parameter for a command of the program in a specific state. Finally, Applicants assert that Linden's step for making a **result** a constant does not anticipate fixing a variable parameter.

Applicants further note that there is no teaching in Linden which anticipates the claim language of "obtaining statistical data for the appearance frequency of each available state" as is expressly claimed in Claims 2-4, 8-9, 11-12, 14 and 16. In rejecting those claims, as well as the other dependent claims, the Examiner lists terms used in the Linden reference (e.g., "instruction sequence,

10/085,455

result, constant, Register=3, optimization step 44, optimized instruction stream" on page 6 of the Final Office Action, but the Examiner does not explain how Linden's use of those terms anticipates the claim language. Applicants contend that the Examiner's duty to apply teachings of the cited art to the claims in order to establish anticipation, and not to simply list terms from the reference.

It is well established under U. S. Patent Law that, anticipation under 35 USC 102 is established only when a single prior art reference discloses each and every element of a claimed invention. See: In re Schreiber, 128 F. 3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997); In re Paulsen, 30 F. 3d 1475, 1478-1479, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994); In re Spada, 911 F. 2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990) and RCA Corp. v. Applied Digital Data Sys. Inc., 730 F. 2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). Since the Examiner has not established that the Linden patent teaches steps or means for translating and optimizing a program comprising steps of performing a dynamic analysis during execution to determine whether the execution speed of said program can be increased by fixing, in a specific state, a parameter for a predetermined command in said program; employing

10/085,455

results of an analysis for the generation, in said program being compiled, of a path along which said parameter of said predetermined command is fixed in said specific state, or obtaining statistical data for appearance frequency for each available state and using that statistical data for dynamically generating a path along which the parameter of a particular command is fixed in that state, it cannot be maintained that Linden anticipates the invention as set forth in the independent claims, Claims 1, 3, 7, 10, 11, and 13-16, or the claims which depend therefrom and add further limitations thereto. Since the Linden patent publication does not teach the means and steps as claimed, it cannot be maintained that Linden anticipates the invention.